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ABSTRACT OF THE DISCLOSURE

A method and apparatus are provided for the transmission of radio data between at least two transmitters and one receiver, said method employing at least one multi-carrier data transmission signal. The aforementioned multi-carrier signal is formed by a temporal succession of symbols comprising: (i) informative data elements, and (ii) reference elements known as pilots which are distributed within the informative data elements according to a pre-determined pattern. Moreover, the value of said pilots at transmission is known to the receiver. At least two transmitters use different pilot patterns such that, at a give instant and a give frequency, only one pilot can be received (possibly with other informative data elements) by the receiver from other transmitters.